Engineered for tomorrow

Adobe Embedded Print Engine

The future-proof technology for printers of tomorrow.

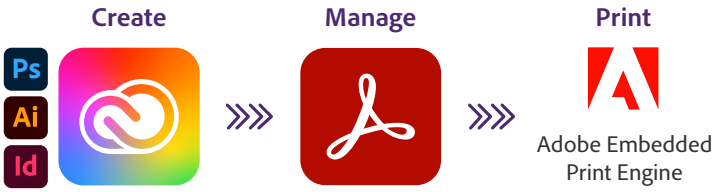
Key highlights:

- Ensure native consumption of PDF and PostScript
- Deliver a truly WYSIWYG print experience
- Leverage the Adobe advantage
- Build once and deploy for a range of devices
- Unlock peak performance with powerful capabilities
- Be AirPrint ready

Print and Adobe

Revolutionizing printing with innovative technologies, since 1984.

Adobe revolutionized the world of print with the creation of PostScript in 1984, and then the Portable Document Format (PDF) 10 years later. From Adobe Creative Cloud (to create content) to Adobe Acrobat (to manage content) to Adobe Embedded Print Engine (to print content)—Adobe's product portfolio serves the entire content workflow.



Adobe Embedded Print Engine's foundational technologies, including Adobe PostScript, Adobe PDF Library, and Adobe Color Engine are employed not only by Adobe Creative Cloud applications such as InDesign, Illustrator and Photoshop but also by Adobe Acrobat. The result is superior and reliable rendering that sets the industry benchmark.

Adobe Print solutions are continuously enhanced and extended by ongoing investment and innovation. Adobe continues to lead the industry and bring award-winning technology to printers across the globe. OEMs should partner with Adobe's world-class engineers who provide support in the form of workshops, training, technical teleconferences, regular engineering interactions, and more. Adobe's Technical Account Managers, located across continents and time zones, ensure effective communication and speedy resolution of queries.

The focus on PDF printing

250B+

PDFs opened in Adobe Acrobat Reader in a year!

100M+

use Adobe Acrobat Reader everyday (mobile and desktop combined)

900M+

PDFs openend in Adobe Acrobat Reader mobile per month

PDF

Mobile printing based on PDF

Cloud printing based on PDF

Worldwide ISO Standard

PDF-centric Adobe Document Cloud

PDFs are now the format of choice for organizations and individuals to share and print documents across devices and platforms. It is popularly used by smartphones and tablets for storing and printing documents, the usage of which has grown significantly in the last few years. More and more PDFs are being sent to printers from mobile devices, especially with the rise of services like AirPrint on iOS, Mopria on Android, various cloud print platforms, and many of the OEM-specific Android print services.

As an ISO standard recognized worldwide, PDFs are preferred for document exchange, collaboration, and print accuracy. Being both a document format and page description language (PDL), it does not need any conversion for printing.

The advantages of using PDF in mobile and cloud printing workflows are many. A smaller document size allows for faster transmission over networks. It keeps the content live until it gets ripped, allowing for last minute object level operations and optimizations. PDF documents are printed at device resolution, resulting in far superior print quality compared to raster formats generated on mobile devices.

By virtue of being an independent container, a PDF ensures a rich variety of data appears the same everywhere. Data encryption and digital rights management (DRM) support for document security workflows make it an important consideration in office printing scenarios.

Give your printers an edge with Adobe Embedded Print Engine

Equip your printers with the next-generation RIP that natively processes PDF and PostScript files for faster and more reliable printing.

Handle the popular PDF format from a variety of desktop, mobile and cloud sources such as AirPrint, Mopria, various cloud print platforms and more.

Ensure accurate color representation with support for ICC profiles and a common code for native rendering of PDF and PostScript files.

Enable seamless switching between PDF and PostScript jobs with minimal overhead.

With Adobe Embedded Print Engine, you can empower your customers to have a WYSIWYG experience across screen and paper by giving your devices the ability to accurately print on paper what they see in Acrobat Reader.

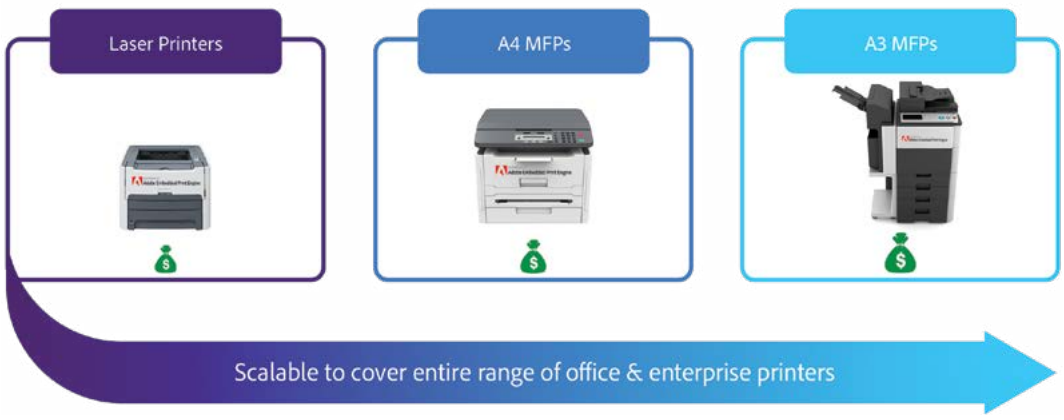
Decrease your time-to-market with a one-time development effort by tailoring Adobe Embedded Print Engine for a wide range of target printers—from resource constrained home printers to high-end enterprise multifunction printers.

With both variants (32-bit and 64-bit) available, you can integrate Adobe Embedded Print Engine seamlessly with any platform of your choice.

The all-new Adobe Embedded Print Engine architecture helps boost printer performance significantly.

Adobe Embedded Print Engine is Apple AirPrint certified—which means any print device that embeds Adobe Embedded Print Engine is assured to have best-in-class quality and performance for printing PDFs.

Partner with Adobe's world-class engineers who provide support in the form of workshops, training, technical teleconferences, regular engineering interactions, and more.



With the adoption of Adobe Embedded Print Engine, you will be able to levarage the Adobe brand for your marketing.

POWERED BY
Adobe Embedded Print Engine

Redefine printing with new features

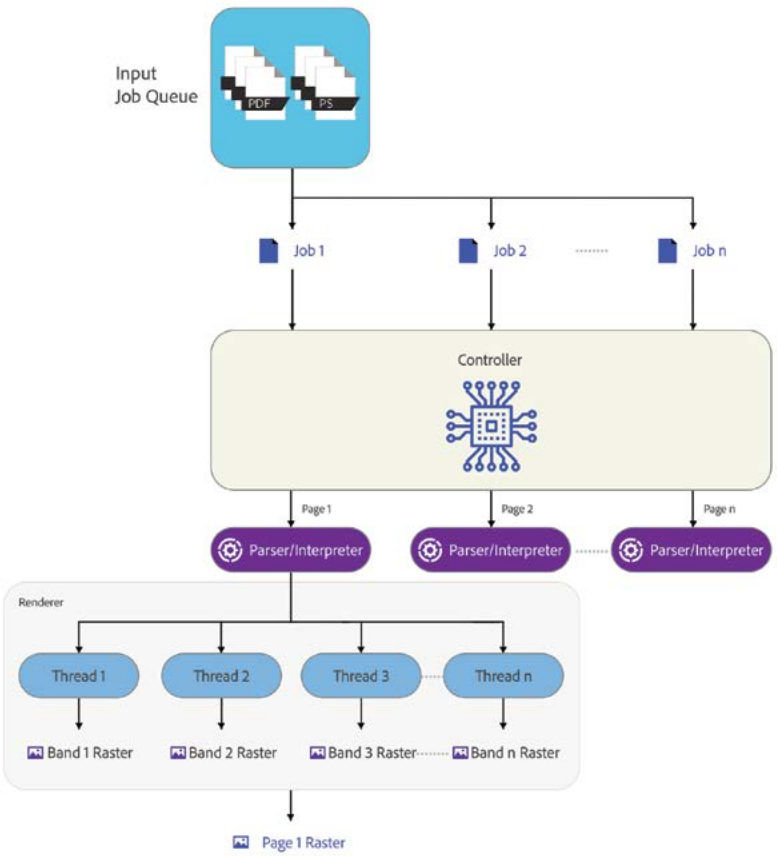
With Adobe Embedded Print Engine mode, all type of PDFs from any source will be printed better, faster, and predictably on all types of printers/MFPs. A host of features make this possible.

Native PDF rendering

Give your print devices the ability to quickly process a PDF job directly, eliminating intermediate conversion to PostScript, with native PDF rendering. Take advantage of significant performance improvements due to major architectural improvements.

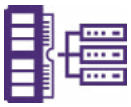
Parallelism at jobs/pages level

Run multiple instances of RIPS in parallel (across multiple jobs, pages of the same job and multiple bands of the same page) using the Multi-RIP feature. Start accepting the next page available for processing as soon as a RIP instance is free from processing the current page.



Parallelism within a page

Use Multi-Threaded rendering to allow a page to be divided into multiple bands by configuring the band mode, which enables processing of bands in parallel to enhance performance with minimum bottlenecks.



Enhanced Memory Manager

Boost the performance of both PDF and PostScript jobs with Memory Manager enhancements that increase the efficiencies of memory and caches.

64-bit support

Maximise the performance of modern printers for PDF and PostScript jobs with 64-bit support.

Latest core technology

Use the same technology infrastructure for PDF parsing, graphic/font handling shared with flagship Adobe products and ensure a more predictable print output (consistent with Adobe Acrobat).

Advanced font management

Eliminate the need to first convert fonts in PDF jobs to a PS compatible format and handle fonts separately for PDF and PS jobs to boost performance of PDF jobs and to ensure a more predictable print output (consistent with Adobe Acrobat). You can also download and install additional fonts for a duration specified, as per your requirements.

Enhanced graphic handling

Reproduce graphics shown in Adobe Acrobat as accurately as possible and ensure a more predictable print output (consistent with Adobe Acrobat).

Support for ICC color profiles

Reproduce colors shown in Adobe Acrobat as accurately as possible to ensure a more predictable print output (consistent with Adobe Acrobat) and control how input job colors are converted to final device colors, based on characteristics of that specific device.

Powerful transparency controls

Get the same level of transparency controls as in Adobe Acrobat to ensure a more predictable print output (consistent with Adobe Acrobat) with transparent and opaque artworks blended correctly and seamlessly.

Higher tolerance for non-compliant PDFs

Reduce failure and error scenarios while rendering non-compliant PDFs to ensure a more predictable and reliable print output (consistent with Adobe Acrobat).

Adobe Embedded Print Engine at a glance

Parameter	Description
Typical market segments	• Office (MFP, LaserJet, Business Inkjet) • Small Office/Home Office SFP • All-in-one printers • Entry level large format printers
Typical jobs	• Content created by knowledge workers (using Office applications, Acrobat, and CC applications) • Personal photos • Web pages • Cloud printing (including GCP) • Mobile printing (AirPrint/Mopria/Android)
Bundling	• RIP part of embedded controller
Parallel RIPs	• Multiple RIPs on the same MFP
PDL suport	• Native PDF (Latest PDF specification) • Native PS (PostScript Language Level 3)
Recommended processor	• Intel Atom and equivalent • ARM Cortex
Minimum Number of Cores	• One
Operating system	• All flavors of Linux and ThreadX (32 bits, 64 bits) • Can be made available on custom embedded platforms (including proprietary platforms)
Hard disk	• Optional

Parameter	Description
Memory Requirements	• Memory footprint (per instance of RIP): 14.35 MB (including PDF and PostScript)
Output Color Models	• Color Models: Device CMYK, Device RGB, Device Gray • Bit Depth: 1, 2, 4, 8 bits per channel per pixel • Resolution: Upto 2,400 dpi
PDF Standards	• PDF/A—PDF/A-1a, PDF/A-1b, PDF/A-2a, PDF/A-2b, PDF/A-2u, PDF/A-3a, PDF/A-3b, PDF/A-3u • PDF/UA—PDF/UA-1 • PDF/E—PDF/E-1
Fonts	• All PostScript fonts (Type 0, Type 1, Type 2, Type 3, Type 32, Type 42) • CID fonts (Type 0, 1, 2, 4) • Adobe Multiple Master Fonts (for emulating referenced fonts not present in printer) • TrueType Fonts (encapsulated as Type 42 font)
Raster Transfer Models (for Planar and Interleaved)	• Banded • Banded frame (hybrid) • Full frame
Job Ticketing	• Job ticketing via PS, PJL or OEM custom commands
Layout and imposition	• N-up and booklet
Color management, transparency, screening and other features	• Color rendering dictionary and color space array support for PostScript • ICC profile support for PDF • Interface provided to plug in third-party color management systems • Transparency handling at resolution controlled by OEM • Object-based custom halftone • Interface provided for third-party halftone screens • Limit Toner • Tag plane

Achieve more with the Adobe advantage

For over 35 years, Adobe has shown leadership in Print and PDF technology, with a proven track record of making partners successful. Today, Adobe remains as committed as ever to deliver world-class customer service and support that promote the success of your product. With Adobe, you get:

- An end-to-end partnership that ensures every requirement is met. From technical evaluation to the final stage of shipping with Adobe technology, you get support in the form of workshops, trainings, technical teleconferences, regular engineering interactions, and more
- A team of highly trained world-class engineers capable of delivering customized products on a myriad of custom and proprietary platforms
- Quality controls built into every stage of software development—stringent hand-offs and quality standards to ensure that only best-in-class releases are shared with partners
- A team of Technical Account Managers located across continents and time zones ensures effective communication and speedy resolution of queries

With recent introduction of Tandem Customer Support, two Technical Account Managers support a Customer. One Technical Account Manager is closer to Customer and the other is closer to the Engineering team. This ensures extended hours of support and improved response turnaround time.

Adobe is committed to innovate in the areas of Print & PDF, including embedded, offset, digital production, lower end printers, mobile and cloud. Adobe will work closely with you to deliver the latest features that will help you to continue delighting your customers.

Get started

For more information on how Adobe Embedded Print Engine can benefit your business, contact us at aepe@adobe.com.

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